

CLAIMS

1. A method for forming cobalt silicide on a body which has a surface that comprises silicon, the method comprising:

forming a cobalt layer on said surface;

5 forming a titanium layer over the cobalt layer by ionized physical vapor deposition;

reacting the cobalt with the silicon to form cobalt silicide; and

removing the titanium layer, and if any cobalt has not reacted with the silicon then removing the unreacted cobalt;

10 wherein the titanium layer is formed by ionized physical vapor deposition.

2. The method of Claim 1 wherein during the deposition of the titanium layer the body is attached to a support biased with an AC power of 0 W.

3. The method of Claim 1 wherein during the titanium layer deposition the distance between the titanium target and the body is at least 140 mm.

15 4. The method of Claim 1 wherein the titanium layer is at most 7.5 nm thick.

5. The method of Claim 1 wherein said silicon surface is located at a bottom of an opening having aspect ratio of at least 2.5.

6. The method of Claim 7 wherein at least part of a sidewall surface of the opening is made of a dielectric.